ABSTRACT

A magnetic sensor for determining the position of a cellular phone in linear movement along an axis of translation, the sensor including a measuring cell fitted to a magnetic circuit and capable of measuring the variations in the value of the magnetic induction flux consecutive with the reluctance variations of the magnetic circuit. According to the invention, the sensor further includes a single delimiting fixed magnetic circuit between two fixed pole parts, a variable air gap within which at least a magnetic induction is created that extends along a length parallel to the axis of translation and at least equal to the travel to be measured of the cellular phone, and a measurable air gap to which the measuring cell is fitted.